ABSTRACT

Highly transparent alumina hydrate particles having a large pore volume, having a pore diameter which falls in a specified range and, when formed into a high-concentration dispersion sol, exhibiting a low viscosity are provided. Alumina hydrate particles having a composition represented by the general formula $x\ M_2O \cdot y\ (NH_4)_2O \cdot Al_2O_3 \cdot z\ H_2O$ ($2 \times 10^{-4} \leq x \leq 25 \times 10^{-4}$, $0.1 \times 10^{-4} \leq y \leq 20 \times 10^{-4}$, $0.6 \leq z \leq 2.5$, M represents an alkali metal; when the alkali metal is in the form of M_2O, x is the number of moles thereof per mol of Al_2O_3; when ammonia is in the form of $(NH_4)_2O$, y is the number of moles thereof per mol of Al_2O_3; and z is the number of moles of hydration water (H_2O) per mol of Al_2O_3), the alumina hydrate particles having an average particle diameter of 0.02 to 0.2 μm, a total pore volume of 0.5 to 1.5 ml/g, and a volume of pores whose diameter is from 15 to 30 nm ranging from 0.3 to 1.0 ml/g.